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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,399	09/15/2003	Barry Bronson	10008364-3	3734

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

PHAM, HAI CHI

ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/663,399	Applicant(s) BRONSON, BARRY	
	Examiner Hai C Pham	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15,20-22,24,26-30 and 32 is/are rejected.
- 7) ☒ Claim(s) 8,16-19,25,31 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The declaration under 37 CFR §1.111 is defective. The specification to which the declaration is directed has not been adequately identified since it is directed to the parent application (S/N 10/044,676) instead to the current Application. A new declaration in compliance with 37 CFR 1.67(a) identifying this application by application number (e.g., S/N 10/663,399) and filing date is required. See MPEP §602.02.

Claim Objections

2. The following claims are objected to because of the following informalities:

Claim 22:

- Line 7, "more-alignment" should read --more alignment--.

Claim 23:

- Line 7, "more-alignment" should read --more alignment--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 5, 7, 10-15, 20-22, 24, 26, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onodera et al. (Pub. No. U.S. 2001/0040867) in view of Heemskerk et al. (U.S. 6,310,838).

Onodera et al. discloses an optical disk apparatus and a method for writing figures on a disk storage medium having a thermally-sensitive layer (recording layer whose optical characteristics change by irradiation of a laser light source such that a visible image pattern is formed) and embedded disk information with pre-recorded data formed on at least a portion of the surface of the disk storage medium (character information prerecorded in the TOC area of the optical disc) (paragraph [0057]), the apparatus comprising a rotational drive (spindle motor 29, Fig. 3) for rotating said disk storage medium (DSC), a transverse drive (feeding motor 30) including a laser head (pickup/write head 28) for moving a laser (not shown) substantially transversely with respect to said disk storage medium, a memory (pit art data memory 37) including a symbol set and a label printer driver (LD drive unit 27), and a processor (system controller 21) communicating with said memory, said rotational drive, said transverse drive, and said laser, and wherein said processor uses said label printer driver to control said rotational drive and said transverse drive in order to thermally write said symbol set to said thermally-sensitive layer of said disk storage medium using said laser (Fig. 3).

However, Onodera et al. fails to teach the pre-recorded data providing the required laser power of the laser (claims 1, 7, 22), and the read and use of the alignment marks for manipulating the means for heating or laser in order to write the

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figures (claim 12, 24), the embedded information being used to determine the location of the alignment marks (claim 13), pre-printed alignment marks (claim 14).

Heemskerk et al. discloses an optical record carrier having pre-recorded information, which includes laser power in a system area (col. 8, lines 2-5) along with pre-recorded alignment marks (or address marks), which enables positioning of the read/write head anywhere on the still unrecorded surface of the record carrier (col. 4, lines 14-48), the recording layer being heated by a laser light during recording to produce a structural change of the recording layer.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the pre-recorded alignment marks as well as the information on the required laser power for writing in the device of Onodera et al. because Heemskerk et al. teaches this to be known in the art to allow accurate positioning of the optical laser head with respect to the optical disk during the writing operation.

Onodera et al. further teaches:

- a rotational position variable that tracks a rotational position of said disk storage medium (paragraphs [0143]-[0153]),
- a transverse position variable that tracks a transverse position of said laser head (paragraphs [0143]-[0153]),
- means for heating being a laser,
- means for allowing a user to view and modify the existing symbols and graphics (pit art data editing part 41),

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- means for storing a label data file within the thermally sensitive layer (TOC area),
- said laser comprising a label printer writing device (pickup 28) positioned above said disk storage medium, and wherein the heating step is performed by said label printer writing device (Fig. 3).

Onodera et al. discloses the read laser and a writing laser (pickup 28) being positioned above the disk storage medium (DSC) and thus fails to teach the pickup/writing head being positioned below the disk as claimed in claim 5. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to position the pickup/writing head below the disk storage medium, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

5. Claims 4 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onodera et al. in view of Heemskerk et al., as applied to claims 1 and 24 above, and further in view of Cutler et al. (U.S. 5,967,676).

Onodera et al., as modified, discloses all the basic limitations of the claimed invention except for the disk orientation variable that tracks an orientation of said disc, and means for detecting existing graphics and empty area.

Cutler et al. discloses an image orientation system for disk printing based wherein the reference marks are either captured or physically provided on the disk such that the orientation of the disk is determined and such that new visible text and/or graphics is printed onto the disk in empty area relative to pre-printed material.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Onodera et al. with the aforementioned teachings of Cutler et al. The motivation for doing so would have been to allow the disc to be written with new embedded data after the initial production of the disc as suggested by Cutler et al.

6. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onodera et al. in view of Heemskerk et al., as applied to claim 1 and 7 above, and further in view of Kahle (U.S. 6,074,031).

Onodera et al., as modified, discloses all the basic limitations of the claimed invention except for the separate label printer being positioned above the optical disk while the read/write laser head is disposed below the optical disk.

Kahle, an acknowledged prior art, discloses a method and apparatus for printing labels on digital recording media, the apparatus includes an independent label printer (12) positioned above the optical disk, separate from the read/write laser head disposed on the other side of the disk (col. 4, lines 45-65).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Onodera et al. with the aforementioned teachings of Kahle. The motivation for doing so would have been to allow both data recording and figure writing operations to be performed simultaneously.

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7. Claims 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onodera et al. in view of Heemskerk et al., as applied to claim 24 above, and further in view of Wen et al. (U.S. 6,019,151).

Onodera et al., as modified, discloses all the basic limitations of the claimed invention except for the heating means being a thermal writing head, and the label being composed of different colors disposed in a pattern within the thermally sensitive layer.

Wen et al. discloses an apparatus for printing images on the label area of a compact disk (22) using a thermal print head (28) and a donor web (26) having a plurality of colored dye patches.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a thermal label printer in the modified device of Onodera et al. because Wen et al. teaches this to be known in the printing art that a variety of printing engine types can be used to print label on the surface of a compact disk.

Allowable Subject Matter

8. Claim 23 is allowed.

9. Claims 8, 16-19, 25, 31 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claims 8 and 19 is the inclusion therein, in combination as currently claimed, of the limitation "the loading, heating, and manipulating steps are performed if said disk storage medium is inverted", which is not found taught the prior art of record considered alone or in combination.

The primary reason for the indication of the allowability of claim 16 is the inclusion therein, in combination as currently claimed, of the limitation "the preliminary steep of printing said one or more alignment marks to said thermally-sensitive layer before the loading step", which is not found taught the prior art of record considered alone or in combination.

The reason for allowing claims 17-18, 25, 31 and 33 have been indicated in the previous Office action.

Response to Arguments

11. Applicant's arguments with respect to claims 1-7, 9-15, 20-22, 24, 26-30 and 32 have been considered but are moot in view of the new grounds of rejection as presented in this Office action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

August 12, 2004